

Work Order ID 162912

162912

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Friday, June 16, 2017 8:16:23 AM

Item ID: D3573-3 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Adapter
 Start Date: 6/19/2017 Start Qty: 6.00 *6* Cust Item ID:
 Required Date: 6/29/2017 Req'd Qty: 6.00 *6* Customer:
 Reference:

Approvals: Process Plan: ^{DAS}21 Date: JUN 16 2017 Tooling: Date: Run Start *NR1*
 QC: ⁹⁻⁸⁹ Date: SPC (Y/N): Date: Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3573	Rev A								
100	BAND SAW	0.00							
100									
Bandsaw	Memo	0.53							
Jeaspa Bandsaw	Cut blank 3.500" long								
110	HAAS CNC VERTICAL MACHINING #1	1.29							
110									
HAAS 1	Memo	1.26							
HAAS CNC vertical machine #1	Machine as per Folio FA673 and Dwg D3573								
120	QC2- Inspect parts off machine FAI/FAIB	0.00							
120									
QC	Memo	0.06							
Quality Control									

6 0 0 SC
 17/06/24

DAS
 14
 9-89
 6 1 1 SC
 17/06/23

DAS
 14
 9-89
 6 1 1 SC
 17/06/23

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
<i>part the measure 340-866 was 380</i>									
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER : ☐							

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 Revision ID: Stop *NS2*
 Item Name: Adapter
 Start Date: 6/19/2017 Start Qty: 6.00 *6* Cust Item ID:
 Required Date: 6/29/2017 Req'd Qty: 6.00 *6* Customer:
 Reference: 2411

Approvals: 2411 Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.12				6	4		DAS 45 2017-7-10 9-89
140 *140* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.36				(x6)	0		20170711 BEB.
150 *150* Powdercoat Powder Coating	Grey Sandtex (Ref: 4.3.5.6) per QSI005 4.3 M 136 570 Memo START TIME: 8:55 FINISH TIME: 9:05	0.00 0.39				6	0	170713	34 9-89

DQA:

Date:

2017-07-21

QA Closed:

Date: JUL 19 2017

WORK ORDER NON-CONFORMANCE / UPDATE

Work Order update only ☐

Work Order: <u>162912</u>		DISPOSITION		AGAINST DEPARTMENT/PROCESS					
Part No. <u>D3573-3</u>		Rework ☒		Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐		
NCR No. <u>17-6542</u>		Scrap ☐		Machining ☒	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐		
		Use-as-is ☐		Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐		
		Suspected Unapproved ☐		Large Fab ☐	Composite ☐	Supplier ☐			
Date: <u>17.07.05</u>		Step #: <u>110</u>		QTY Effective: <u>①</u>			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition			DAS 9 9-89 <u>17.07.05</u>		
Thickness .390 ^{+0.010} _{-.000} is .378" R.C. operator				scrap destroy replace <u>BM 136463</u>			Completed By		
							<u>SL</u> <u>17/07/10</u>		
							Lead hand / Supervisor Approval Verification		
							DAS 14 9-89 <u>17/07/10</u>		
							QC / QA Coordinator Approval		
							DAS 9 9-89 <u>17.07.05</u>		
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☒	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☒				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER :							

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 Required Date: 6/29/2017 Req'd Qty: 6.00 ***6*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2*** *PHU*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC3- Inspect Part Finish	0.00							
160									
QC	Memo	0.06				<i>ce</i>			JUL 13 2017 DAS 33 9-89
Quality Control									
170	Identify as per dwg & Stock Location: <i>GA</i>	0.00							
170									
Packaging	Memo	0.06				<i>box</i>			JUL 13 2017 DAS 26 9-89
Packaging	LOCATION : GA								
180	QC21- Final Inspection - Work Order Release	0.00							
180									
QC	Memo	0.60							<i>17/7/17</i>
Quality Control									

(Signature) JUL 13 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☒ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : <u>17.02.05</u>		Step #: <u>110</u>		QTY Effective : <u>2</u>		MRB (QSI042) Approval DAS 22 17.07.06 9-89	
Description Work Order Deviation				Disposition			
counterbore .675 is .030 off center of hole .266. R.C. operator				ACCEPTABLE DEVIATION. THE $\phi 0.226$ HOLE AT TOP OF PART IS WHERE IT SHOULD BE LOCATED. NO STRUCTURAL ISSUE. THE $\phi 0.675$ CBORE IS OFF BUT STILL PROVIDE ENOUGH CLEARANCE FOR A TOOL (SOCKET) TO BE INSERTED IN PLACE WHILE APPLYING TORQUE.			
				Completed By SC. 17/07/10 Lead hand / Supervisor Approval Verification DAS 14 17/07/10 9-89			
				QC / QA Coordinator Approval DAS 9 17.07.06 9-89			
Root Cause		FAULT CATEGORY					
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	☒ Operator	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	☒ Fit/Function	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐						
Misidentified ☐	Past Due ☐	OTHER : _____					

Picklist Print

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Work Order ID: 162912

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Parent Item: D3573-3

D3573-3

Parent Item Name: Adapter

Start Date: 6/19/2017

Required Date: 6/29/2017

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP Rev:A New Issue 07-01-29 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B0.500X02.50 0		Purchased	No			100	f	9.6250	0.292	1.844210			

M6061T6B0 500X02 500

**

6061-T6 Bar .500 x 2.50

Location

Loc Qty

Loc Code

MAT001

9.625

M136463

9.625

3.69

OK
17/06/24

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev I

DART AEROSPACE LTD		Work Order: 162912
Description: Adapter		Part Number: D3573-3
Inspection Dwg: D3573	Rev: A	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

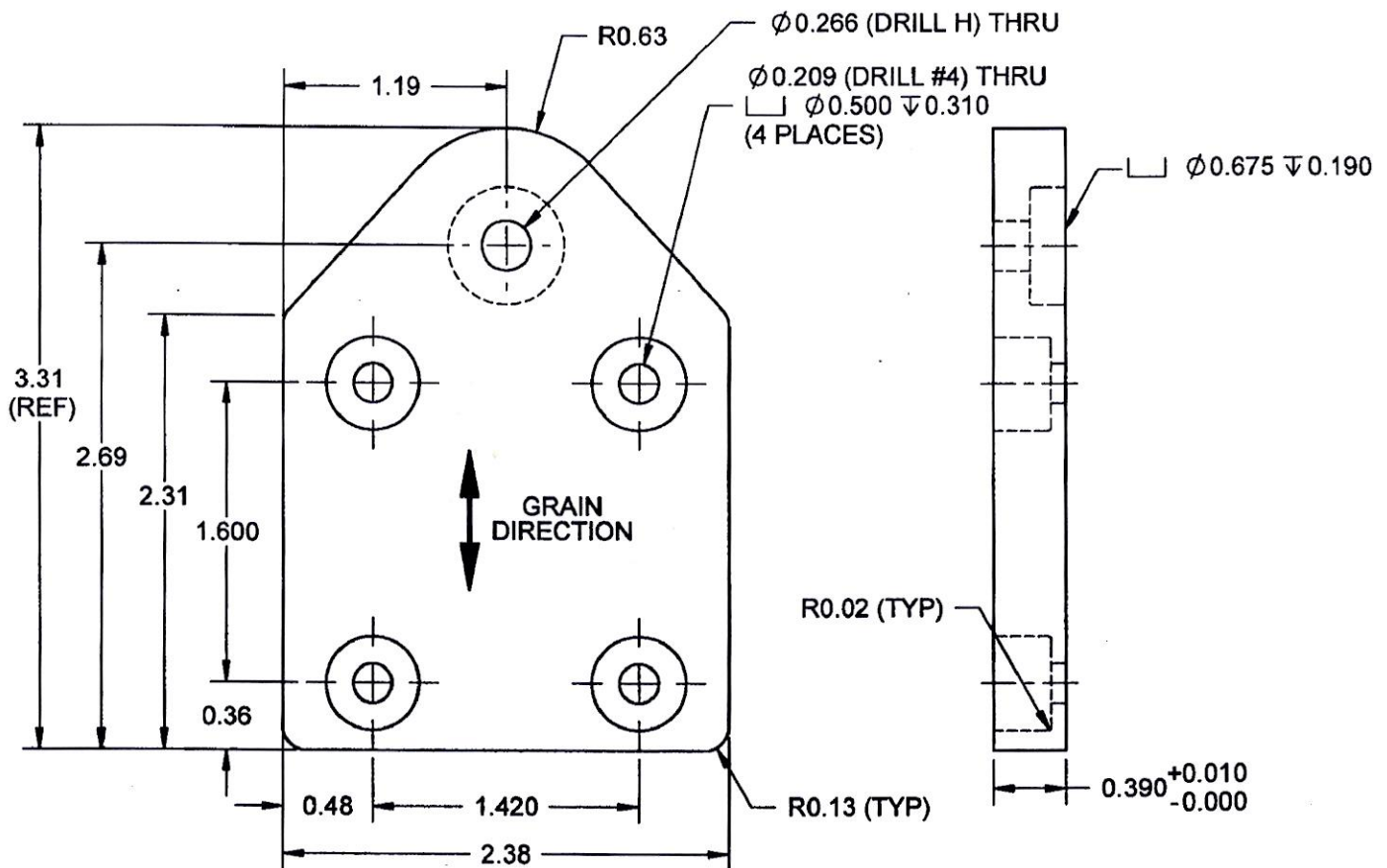
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
3.31	+/-0.030	3.316	✓		Ver RTOS	
2.69	+/-0.030	2.688	✓		Ver RTOS	
2.31	+/-0.030	2.311	✓		"	
1.600	+/-0.005	1.598	✓		"	
0.36	+/-0.030	0.358	✓		"	
1.19	+/-0.030	1.196	✓		"	
2.38	+/-0.030	2.381	✓		"	
1.420	+/-0.010	1.419	✓		"	
0.48	+/-0.030	0.480	✓		"	
R0.63	+/-0.030	R.0.630	✓		Plug	
R0.13	+/-0.030	R.0.125	✓		R.G.	
R0.02	+/-0.030	R.0.015	✓		R.G.	
Ø0.209	+0.005/-0.001	0.209	✓		Ver RTOS	
Ø0.266	+0.006/-0.001	0.267	✓		"	
0.390	+0.010/-0.000	0.395	✓		"	
Ø0.675 x 0.190	+/-0.010	Ø0.676 x 0.190	✓		"	
Ø0.500 x 0.310	+/-0.010	Ø.5 x 0.309	✓		"	

Measured by: J.C. ^{DAS 14 9-89}	Audited by: 45 ^{DAS 9-89}	Prototype Approval: N/A
Date: 27/06/24	Date: 2017-7-10	Date: N/A

Rev	Date	Change	Revised by	Approved
A	07.04.04	New Issue	KJ/JLM	[Signature]

DART

DESIGN <i>LE</i>	DRAWN BY <i>LE</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>PH</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3573	REV. A SHEET 2 OF 4
DATE 07.02.19	TITLE ADAPTER		SCALE 1:1

RELEASED
07.04.02**D3573-3 ADAPTER****NOTES:**

- 1) MATERIAL: 6061-T6 (OR T651/T6510/T6511/T62) ALUMINUM BAR
PER QQ-A-225/8 OR QQ-A-200/8 OR AMS 4117/4128/4115/4116 OR AMS 4160
(REF DART SPEC M6061T6B)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT "GREY SANDTEX" (4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) IDENTIFY WITH DART P/N "D3573-3" USING FINE POINT PERMANENT INK MARKER
- 5) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX

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